THIN FILM SERVO HEAD APPARATUS WITH CANTED SERVO GAPS

ABSTRACT

A thin film servo head apparatus is described that provides verification of time-based servo marks on a magnetic tape. The thin film servo head apparatus includes a plurality of thin film servo heads formed in a substrate. The substrate is canted such that servo gaps included in each of the thin film servo heads are substantially parallel to the time-based servo marks. Thin film servo heads eliminate the high labor, low yield machining process associated with conventional ferrite composite servo heads. Thin film servo heads may be fabricated in bulk on substrate wafers to reduce manufacturing time and cost. The invention described herein enables thin film servo heads to be used with time-based servo markings by defining a servo gap spacing such that when the substrate is canted, the servo gaps of the thin film servo heads substantially align with the time-based servo markings.